

FARM AND GARDEN.

MATTERS OF INTEREST TO AGRICULTURISTS.

Some Up-to-Date Hints About Cultivation of the Soil and Yields Thereof—Horticulture, Viticulture and Floriculture.

Value of Barnyard Manure.

ULLETT 174, Ohio Experimental Station: In a newspaper bulletin of the Ohio Agricultural Experiment Station (No. 172) giving the results of experiments with fertilizers on the clay soil of one of its sub-stations, a table was given which indicated that barnyard manure had produced increase of crop to the value of \$2.50 per ton of manure in the three grain crops of a five-rop rotation, leaving the residual effect on the two grass crops yet to be ascertained. By an unfortunate lapse of memory, however, the mistake was made of computing only half the quantity of manure actually used, as it had been used on two crops in the three years, namely, corn and wheat, at the rate of 8 tons on one plot and 4 tons on another on each crop, making a total application to the two crops of sixteen tons and eight tons respectively, and reducing the value of the increase due to the manure to about \$1.25 per ton. The manure used in this test had been accumulated from horses and cows in an open barnyard during the winter and summer previous to its application, and was under, rather than above the average open yard manure in quality. A similar comparison of manure and fertilizers has been made at the central station, beginning immediately after the relocation of the station in Wayne county, on the same crops, corn, oats, wheat, clover and timothy, grown in a five-year rotation. Four wheat crops have now been taken in this rotation, three crops each of corn and oats and five crops of hay, the meadows thus far being mown but once a year. Five tracts of land are included in the test, each tract containing thirty plots of one-tenth acre each and so managed that each crop will be represented each season after the first rotation is completed. At this stage of the work only partial results can be given, as a full rotation would include five crops each of the cereals and ten crops of hay; but it may be useful to note the results already obtained, which are as follows, the value of the increase being computed on the bases of 33-1-3 cents per bushel for corn, 25 cents for oats, 66 2-3 cents for wheat, \$3 per ton for straw and stover and \$8 for hay:

Total manure per acre.	Grain	Hay	Straw	Stover
16 tons in 3 applications.....	\$5.56	\$1.77	\$12.07	\$17.75
8 tons in 3 applications.....	2.81	1.26	6.79	12.96

It will be observed that in this test the smaller application of manure has been relatively the more profitable, but this may not be borne out by subsequent results. At the sub-station there has been but little difference thus far in the apparent effectiveness per ton, whether used at the 4-ton or at the 8-ton rate per acre. The results show an immediate recovery of about a dollar and a quarter on the average in increase of crop, at recent prices, for every ton of manure used. But the long continued experiments by Lawes and Gilbert at Rothamsted, a description of which is given in bulletin 71 of the Ohio station, show that not more than one-half to two-thirds the possible increase from barnyard manure is recovered in the first crops grown from it. We may therefore safely offset the residual effect of the manure against the cost of application and consider the immediate increase as clear profit. In another experiment at the central station, potatoes, wheat and clover are grown in a three-crop rotation, and in this test the increase from manure applied to potatoes has reached \$2.50 per ton, potatoes being valued at 33-1-3 cents per bushel. Barnyard manure is relatively deficient in phosphoric acid, as compared with ammonia and potash, and the experiments of the Ohio station indicate that phosphoric acid is the constituent most needed on the majority of Ohio soils, but that it only produces its full effect in the presence of ammonia and potash. The price of acid phosphate has fallen during recent years until it can now be bought for delivery anywhere in Ohio, at prices which bring its actual phosphoric acid below 5 cents per pound, and as the sprinkling of acid phosphate or superphosphate on barnyard manure is believed to have a beneficial effect in preventing the waste of ammonia from the manure, it would seem that the use of acid phosphate in this manner might serve the double purpose of preserving the ammonia of the manure and increasing the effectiveness of both its ammonia and potash. Experiments on this point are now in progress at the Ohio station.

The Mole. An English paper says: The professional mole catcher was quite an institution in my youth. Like rat-catching, poaching, bird-snaring and fish-netting, night-line setting, and even spearing of salmon in the close season, mole catching "ran in families," and I have known it to run through several generations. These men "went on circuit," and carried their implements of destruction with them, and undertook, for a stipulated price per dozen carcasses, to clear the farm of moles. On a large farm where I was

employed, a lengthy stretch of permanent grass and about thirty acres of arable land, lying between a wild moor and a large river, was "infested" with moles, and many a hard day's work I have had in leveling the hillocks and scattering the soil over the surface of the land. The farmer who employed me was greatly in advance of his times, and his theories as to the practical usefulness of moles, weasels, and almost every kind of wild bird, were the subject of much bucolic ridicule. That is nearly forty years ago, and that farmer is dead, but not his theories. These were founded on long and close personal observations, and their absolute accuracy has long since been recognized by all intelligent field naturalists and agriculturists. As far as moles were concerned, the land where they "most did congregate" was naturally poor, but in course of time the moles improved it, and out of curiosity I visited the old steading and land last summer and found it rich, infinitely superior in heart to that of many other holdings where the demon mole catchers were still employed in the expensive and destructive work.

The mole, like ourselves, is not perfect—it has more than one "redeeming vice," but, taken as a whole, it is a friend of the farmer. It destroys a vast quantity of injurious grubs, and in its searchings for these insects, it certainly does injury to the roots of cereals and other plants, more particularly when the soil is light and in very dry seasons. The destructive "leather jacket" is a great source of its subsistence; it destroys mice, and it even does good as a kind of subsoil drainer of the land. I may conclude with an extract from a letter addressed some years ago by a Yorkshire farmer to a well-known naturalist, a portion of which appeared some years ago in a work dealing with ornithology, entomology and mammalogy in relation to agriculture. "To kill moles is to leave the corn and turnip crops (upon light lands, such as sand and deeply-soiled wold land) to the ravages of the wireworm, the grub (cockchafer) and other insects. I farm, and have farmed, from a thousand to fifteen hundred acres in different parishes, and have noticed that when you try to exterminate moles, rooks, sparrows, etc., you have far more destruction of crops. An old mole-catcher came to me and asked me whether I would have the moles killed on my land. I said, 'No; if I had no moles I should have no crops.' He said, 'You are the first man whom I have heard say that, but you are right.' He then proceeded to say: 'I was employed by a gentleman, who had a large, sandy field, to kill off the moles. It used to grow nice crops, though it was so full of moles. I killed them all, and the field never grew anything to speak of afterwards. The grub, wireworm, etc., used to eat the roots of everything that was sown, and the young plants died off.'

Crystallizing Fruits.

Few confections are more delicious than candied fruit, and few sweetmeats are more expensive, 60 cents a pound being the regulation price, and a pound represents a very small amount. They can be prepared at about half the cost, however, at home, if care is taken.

Cherries, currants, pineapples, apricots, pears and peaches are best experimented upon. The two former can be used in bunches; the pineapple is sliced across the fruit, each piece being a good quarter-inch thick; apricots are cut on one side and the stone slipped out, while pears and peaches are halved, and, of course, peeled. Make a very thick syrup, pound for pound, adding for each pound a small cup of water. Boil the sugar first, then drop in the fruit, and when they have boiled clear take out and drain from the syrup. If the cherries are stoned (the red ex-hearts make the finest, being not too sweet as the white and without the rank tartness of the sour red ones), it is nice to string them on a broom splint, as they can be more easily handled.

Sprinkle liberally with powdered sugar, lay on a sieve and set the fruit in a warm oven. I used a wire dish, such as our grandmothers kept fruit in, set within another dish to catch the syrup. In two hours turn the fruit, sprinkle with sugar again. Keep this up until the sugar has all dripped out. On no account have the oven hot, as it will dry the fruit and leave it like so much leather. And, of course, the fruit must be laid in single rows when drying.

When the juice has evaporated and the sugar has formed a glazed surface, put away in boxes in a dry place. Waxed paper should be laid between each layer. A bureau drawer is as good a place as any to keep them.

New Centres of Distribution.—The big shipping points or production districts are now the big distributing points of the country and not the large cities, as heretofore. Whether this will work to the advantage of the producer or not is an interesting subject for debate. The prices for a car are telegraphed broadcast to every town large enough to consume a car of potatoes, melons, tomatoes or any other product raised for distant markets. The greatest losses to the distributors come from the class that orders the goods and then refuses to accept them on some pretext when the market fails to reveal a margin on arrival of goods.—Fruit Trade Journal.

Small Ridges.—The small ridges left by the drill should remain. They protect the young plants from the wind and from heaving in the winter, for the same agency that pulls the plants up by the roots molders the ridges down at the same time. In dry weather the plants find more moisture in the valleys than if the surface were a level plain to be swept by the wind, as a floor is swept with a broom.—Ex

Cost of an Acre of Wheat.

James Glover of Harper county, Kansas, sends the state agricultural department an estimate, which he says many good farmers approve or have verified, showing the cost at which wheat can be and is raised for in that county on lands that can be bought for \$10 to \$12 per acre and give yields ranging anywhere from 15 to 40 bushels per acre. His figures are as follows:

Interest on land (\$15 per acre) at 8 per cent	\$1.20
Taxes13
Plowing80
Harrowing twice20
Drilling25
Heading	1.00
Seed, average60

Total

On the foregoing basis he places the cost per bushel on different yields per acre, including 6 cents per bushel in each instance for thrashing, thus:

15 bu. per acre cost 34 cents per bu.	
18 bu. per acre cost 29 cents per bu.	
20 bu. per acre cost 27 cents per bu.	
25 bu. per acre cost 22 1/2 cents per bu.	

It is on record that in 1889 E. F. Burchfield of Harper county raised an average of 42-1-3 bushels on a 20-acre field; J. P. Marker of Ellsworth county the same year raised 50 bushels per acre on 130 acres; Israel McComas of Jackson county had 51 bushels average on a 19-acre field, and Warren Fulton of Pottawatomie county harvested 54 bushels per acre from 18 acres. Secretary Coburn has no doubt later thrashing will show that these figures have in many instances been surpassed this year in Sumner, Cowley and other counties, but suggests it would be a mistake for everybody to "rush into wheat" expecting to acquire fortune through often realizing the phenomenal yields mentioned.

The Farmers' Review would like the opinion of its readers on the above estimates.

Horses' Sore Mouth.

Many horses, especially during the first year of their working period, are constantly in possession of a sore mouth, and this not only causes the animal great suffering and usually loss of flesh, but is also a matter of great inconvenience to the driver, says an exchange. This, if continued for several months, is also liable to leave the animal with a chronic habit, such as throwing the head while hitching or unhitching. We have in view one very valuable young horse, owned by a neighbor, which became almost worthless on account of the habit of throwing its head, and at the same time lunging sideways into the ditches. The most effective plan which we have ever tried consists of winding any ordinary bit at the corners and down on the same for about an inch, with tanned sheepskin (which can be procured at any harness store), being sure that it is not too thick and heavy. With this well wound on, now have a cup of sulphur, and each time as the bit is placed in the horse's mouth moisten the leather and rub on a little of the pulverized article. It is well also to lengthen the bridle as much as possible during this time and not drive with a tight checking rein. After having adopted this plan we succeeded in curing a young horse of a very sore mouth which was contracted during the working period the last season.

Cover the Bulb Bed.—Be sure to give the spring blooming bulbs a nice warm winter blanket of leaves, litter from the stable, or brush, or a combination of all, and do not be in a hurry in spring to get them out of their winter clothes. Don't rush out the first warm day and clear away all the brush and litter just because it is unsightly looking. The crocus and snowdrop will not need so warm a covering as the other bulbs and can be uncovered earlier in the spring. But from the tulip, hyacinths, etc., gradually remove the covering, leaving the finest of the stable litter on the beds permanently.—Vick's Magazine for 'emher.

Protected the Birds.—A pretty anecdote is related of a child who was greatly perturbed by the discovery that her brothers had set traps to catch birds. Questioned as to what she had done in the matter, she replied: "I prayed that the traps might not catch the birds." "Anything else?" "Yes," she said. "I then prayed that God would prevent the birds getting into the traps," and, as if to illustrate that doctrine of faith and works, she added "I then went and kicked the traps all to pieces."

Burning Straw Stacks.—A country correspondent reports that farmers are burning the straw stacks in their neighborhood to get rid of them, says Nebraska Farmer. That is more heathenish than the burning of corn for fuel. There is some show of reason for that. But a straw stack is an innocent thing on the farm, and it may be turned to great good. A farmer had better keep his hands in his pockets when he begins to think of burning his straw stacks.—Ex.

Shredded Corn Fodder.—The woeful fashion of waste with corn fodder will stop. Cut up, shredded and baled, it keeps green and sweet, and is a rich, nutritious food. In this shape it promises to be an important item of food in the future.—Ex.

Secretary Wilson says that we make in this country the finest cheese and butter in the world, but are handicapped by the adulterated stuffs that are palmed off on the foreign markets.

The Farmers Review some time ago asked its readers as to the kind of floor most serviceable in a poultry house. The majority of the replies favored a board floor.

Prairie soils will seldom prove satisfactory in the growing of orchards.

A Kansas City negro burglar who attempted to steal time will soon begin doing time. A fifty-cent alarm clock is hardly worth five years in the penitentiary.

A Kansas woman tried to cut off the head of a chicken with a hatchet and severed her thumb sick and clean. A woman and a hatchet is a frightful combination.

The tomato needs rotation with other crops.

Gloxiana seed can be sown either in the fall or spring.

If you like a man show it by refusing to laugh at his enemy's jokes.

Almost Inevitable. The stomach that is not turned by a shaking up on the "briny wate" must be a well fortified one. The gastric apparatus can be rendered proof against sea sickness with that stomachic so popular among travelers by sea and land—Hostetter's Stomach Bitters. It defends the system against malaria and rheumatism, and induces liver complaint, constipation and dyspepsia.

Electric or steam power shears are now largely used by the large flock owners.

Piso's Cure for Consumption has been a God-send to me.—Wm. B. McClellan, Chester, Florida, Sept. 17, 1893.

Thoroughly rinse the buttermilk out of your churn with cold water before scalding it.

A MISSIONARY MEDICINE. Cleanliness begins within. If a man isn't clean inside, he is far from Godliness. A constipated sinner is a stench in the nostrils of the Deity. A man whose food sours in his stomach, and whose liver is laden, can't help looking at the world hatefully with jaundiced eye, and conjuring unwholesome thoughts in his tortured brain. Cleanliness of person begets cleanliness of thought. Cascarets, Candy Cathartic are the missionary medicine which purifies men's bodies and minds. Pure, fragrant, palatable, mild and positive, they clean out the intestinal canal, stimulate the liver and strengthen the bowels. Then a man enjoys again feeling of clarity and brotherly love for his fellows and recommends others to take Cascarets and be as happy as he.

South Dakota pays 50 cents per bushel for the destruction of grasshoppers, thus fixing the market price.

State of Ohio, City of Toledo, Lucas County.

Frank J. Cheney makes oath that he is the senior partner of the firm of F. J. Cheney & Co., doing business in the City of Toledo, County and State of Ohio, and that said firm will pay the sum of ONE HUNDRED DOLLARS for each and every case of Catarrh that cannot be cured by the use of Hall's Catarrh Cure.

Sworn to before me and subscribed in my presence, this 6th day of December, A. D. 1893.

A. W. GLEASON, Notary Public.

Hall's Catarrh Cure is taken internally and acts directly on the blood and mucous surfaces of the system. Send for testimonials, free.

F. C. CHENEY & CO., Toledo, O. Sold by Druggists, 75c.

Hall's Family Pills are the best.

Chicago's woman street commissioner will probably place tidies on all the hydrants.

TO CURE A COLD IN ONE DAY. Take Laxative Bromo Quinine Tablets. All Druggists refund the money if it fails to cure. 25c.

A Maryland negro fell thirty feet into the hold of a steamer and was saved by lighting on his head.

Mrs. Winslow's Soothing Syrup. For children teething, softens the gums, reduces inflammation, allays pain, cures wind colic. 25 cents a bottle.

The number of sheep in the world is estimated at 550,000,000 and 250,000,000 of these are supposed to be merinos.

A Kansas City man is nursing a sore shin which he barked looking over his right shoulder at the new moon for luck.

The best breed of stock to keep is the one that will secure the most rapid and greatest gain in the shortest time.

Mr. Ben Garland, one of our cattle kings, lately bought in the Panhandle 1000 cows with calves, for which he paid \$25,000.

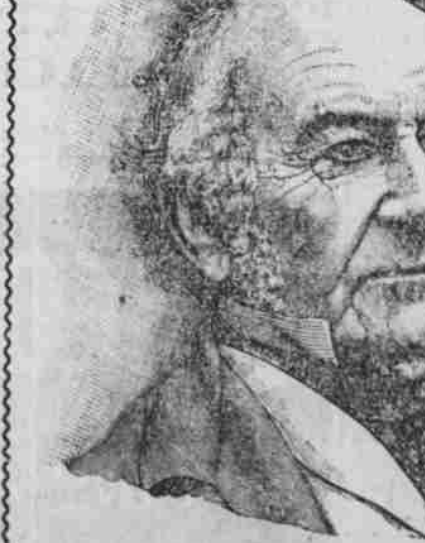
On the day of his marriage a Yankee man jumped out of a hotel window and killed himself. It must be a good deal of a trial for a woman who has never worn but one of her wedding gowns to go into mourning.

A RUBBER.

ST. JACOBS OIL

FOR SORENESS AND STIFFNESS.

It cures in two or three vigorous rubs.



Mr. Gladstone has contributed an important article for the next year's volume of The Companion, to be published in the New Year's Number.

ART CALENDAR

In Twelve Colors FREE TO NEW SUBSCRIBERS.

NEW SUBSCRIBERS who will cut out this slip and send it at once with \$1.00 for a year's subscription to the Youth's Companion, to be received by January 1, 1894, and a full year's volume of The Companion, to be published in the New Year's Number.

THE YOUTH'S COMPANION, 201 Columbus Ave., BOSTON, MASS.

There is such a tangle as an aggravated wrong; have an enemy so stupid that he doesn't know it when he gets even with him.

The great polar explorer pronounces his name, Nansen, but that will not affect the price of lectures in this country.

If any joys are headed this way the telegraph never hears of it, but it makes the announcement that the grip will ravage this country again this winter, with more serious results than followed its last appearance.

It is said that most fools are good looking.

The criminal lawyers in Buffalo are bemoaning the destruction by fire of a sausage factory in that town.

About the worst piece of luck that can happen to a busy man is to make a favorable impression upon a bore.

Have you found any better pasture than alfalfa?

Let the pigs have the windfalls of the orchard.

Above all things don't be close-fisted and mean; a mean man is a despicable creature.

Taste for Apples.

Meehan's Monthly: The superabundance of the apple crop last year has had one good result for the future of the orchardist. It rendered apples so cheap that the consumption was greater than ever before. A taste of this kind once stimulated generally continues; consequently the demand will be larger in seasons to come than it has been hitherto. This year apples have been in Philadelphia markets the whole year through. Last year's supply of late varieties, such as the Baldwin, had scarcely disappeared before the Russian variety, Tetofsky, came in from Virginia. These, of course, will be followed by better kinds.

A Negress Attorney.

Lutie A. Little, a 23-year-old negress, with bright, round face and intelligent eye, entered the criminal court at Memphis, Tenn., one day last week, with all the aplomb of an old practitioner and presented her duly authenticated claims to the privilege of practicing law in the courts of Tennessee. She was admitted without a question. She is the first representative of her sex of any color to be admitted to the bar of Tennessee. She is the only colored woman in the south licensed to practice law. She is the only living colored woman in the United States probably in the world, a member of the bar.

First Trip Into Town.

"Here's some more of the horrible work of them blamed monopolists," said Farmer Hayricks, as he hung his coat over the foot of the bed. "Goodness, where?" asked his wife. "Here's a sign what says 'Don't blow out the gas.' I s'pose they make these folks burn it all night, so's to run up their bills on 'em. Gosh, I don't know what this country's comin' to!"



DROPSY NEW DISCOVERY. Give quick relief and cures worst cases. Send for book of testimonials and 10 days' equipment free. Dr. H. H. HARRIS'S SONS, Atlanta, Ga.

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W. N. U.—WICHITA.—NO. 42.—1897

When answering advertisements please mention this paper.

Chicago's new library is to be kept open on Sunday. This ought to keep a good many people out of the museums of anatomy.

On account of the great quantity of fine fibrous roots growing near the surface, gooseberries should receive a heavy mulching about the time growth commences, to remain on till fall.

A shrewd spinster who keeps four cats finds a scutful of coal in her back yard every morning. By strict economy she buys only half a ton of coal a year.

WE LOAN A BICYCLE TO OUR AGENTS.



You can make Big Money handling our wheels. Largest Assortment in America. This month we sell No. 1 Brand New, Ladies or Gents Bicycle as low as \$18. Other makes second hand and shop worn \$5. to \$35. Write today for catalogue from BROWN-LEWIS CYCLE CO., CHICAGO, ILL.

PENSIONS Get your Pension DOUBLE QUICK Write CAPT. O'FARRELL, Pension Agent, 1425 New York Avenue, WASHINGTON, D. C.

Men's Pants Made of Reading Mills \$2.00 each. Sent by mail, subject to inspection. Write for Samples and Catalogue. AMERICAN MAIL ORDER CO., Dept. A, 21 River St., Chicago, Ill.

Ask your dealer for

Ash Grove Lime, The Best on Earth.

ROOFING The best Red Rope Roofing for 10c per sq. ft., caps and nails included. Submit types for Planter Samples free. The FAY MANILA ROOFING CO., Camden, N. J.

FEATHERS Geese and Duck Feathers. Pillows, Beds, Bunkers and Cushions. Write for prices. Kansas City Feathers Co., 1229 Walnut St.

GET RICH QUICKLY Send for Book, "Inventions Wanted." Edgar Tate & Co., 245 W. 12th St.

GROVES



TASTELESS CHILL TONIC

IS JUST AS GOOD FOR ADULTS. WARRANTED. PRICE 50c.

Paris Medicine Co., St. Louis, Mo. Gentlemen:—We sold last year, 600 bottles of GROVES' TASTELESS CHILL TONIC and have bought three gross "ready this year. In all our experience of 14 years, in the drug business, have never sold an article that gave such universal satisfaction as your Tonic. Yours truly, ANNE, CARL & CO.

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